

**ABSTRACT**

A method includes characterizing portions of a model as being either critical to a real-time execution of the model or non-critical to a real-time execution of the model, and generating code that is capable of real-time execution based on the critical portions of the model while maintaining the full functionality of the non-real-time critical sections, e.g., graphics, logging, other offline calculations, via a communication link and parallel host processing.

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